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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

KEEFER, MICHAEL E

ART UNIT

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2154

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/675,972	Applicant(s) EL MGHAZLI ET AL.	
	Examiner Michael E. Keefer	Art Unit 2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 July 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is responsive to the Amendment filed 7/2/2007.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Wittmann et al. (AMnet: Active Multicasting Network), hereafter Wittmann.

Regarding **claims 1 and 9-11**, Wittmann discloses:

A method for reserving resources in a packet communication network, preferably an IP protocol network, this network being a hybrid network comprising both active nodes and passive nodes, the active nodes alone being capable of taking into account so-called active packets, that is to say those containing information related to a corresponding execution environment of these active nodes, an active data flow being a set of active packets having to be taken into account by one and the same execution environment (this network is disclosed in Fig. 1 as well as the first paragraph of section 2.1, and that it is an IP network containing IP nodes), the said method comprising the steps of:

a) sending on the network of a reservation packet containing a request for reservation of resources constituting an execution environment for an associated active data flow; (See Fig. 3, note the RSVP message with the QF Object inside)

b) receiving of the said reservation packet by an active node of the network (Fig. 3 shows the RSVP message being received at the RSVP Daemon);
and

c) reservation of resources of the node according to the said request,
(Note that in Fig. RVSP Daemon forwards the QF Object to the QF Daemon, which then programs the QoS Filter according to the QF object thereby reserving the filtering resources)

the said method being characterized in that the said reservation packet is an active packet. (The RSVP packet containing the QF Object is by definition active as it will program the QoS filters within an active node. Packets carrying information intended for an active node are active packets. It is clear that the QF Object is information intended for an active node.)

Note that Figure 3 is the diagram of an IP active node operable to perform the steps above.

Regarding **claim 2 as applied to claim 1**, Wittmann discloses:

the packet is in RSVP format. (Pg. 897, Col. 2, Section 3, lines 5-6 state that Amnet is based on RSVP.)

Regarding **claim 3 as applied to claim 1**, Wittmann discloses:

the packet may be a PATH type of the RSVP protocol. (Page 899, Col. 1, Paragraph 7: "A soft state is created and periodically refreshed by PATH or RESV messages. QF objects are included in these messages.")

Regarding **claim 4 as applied to claim 1**, Wittmann discloses:

the reservation packet comprises an identifier of the said active data flow. (Page 889, Col. 1, "different filters serve different group members in the same active network node", and "User data are directed directly to the corresponding QoS filter" clearly imply that there is a designation of a specific flow (i.e. to a specific group or member) that is to receive the filtering described by the QF object See Figure 4 (b) How Node D provides different quality data flows to separate receivers)

Regarding **claim 5 as applied to claim 1**, Wittmann discloses:

the said reservation packet is provided for containing parameters for processing data contained in the said associated active data flow, this processing being a code executable by an active node of the network, (see Fig. 2, which shows the format for the parameters for processing the data in the data flow) and in that, in the case of these processing parameters being present, the step b) is followed by:

b. 1) a step of loading by the said active node of the said corresponding executable code (See Fig. 3, the QF Daemon loads and configures the appropriate QoS-filters); and

b2) a step of execution of the said code by the said active node. (The filters are executed upon members of the group data flow that was reserved. See Fig. 3)

Regarding **claims 8 and 13 and as applied to claims 1 and 5**, Wittmann discloses:

after the step b1), a step of: b3) sending on the network by the said node of a confirmation of loading of the said executable code. (This step is inherent, as in the RSVP protocol when a node is finished with the setup requested by a PATH or RESV message then the message is forwarded onto the next node on the path. In the case of a failure, an error message is then forwarded in the opposite direction. If the node is unable to load the proper filters (i.e. executable code), the RSVP request will fail, and the error message will be returned to the originator of the PATH message. If the node is successful in reserving the resources (i.e. the filters necessary) then the path message is forwarded to the next node, thus the continuance of the PATH message to be forwarded means that the request succeeded at the previous nodes.)

Regarding **claim 14 as applied to claim 1**, Wittmann discloses:

The reservation packet comprises: a first identifier identifying the protocol for the data flow, a second identifier identifying the source/destination of the data flow, and a third identifier identifying the resources to be reserved. (An RSVP reservation request includes the destination of the dataflow. Fig. 2 discloses that the QF filter contains a protocol (In Fig. 2(b) the C-type is used to identify the

video protocol used in the data flow) and also the resources to be used (slices per frame, whether to use color or black and white, the quality filter to provide)).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wittmann as applied to claims 1 and 5 above, and further in view of Eichert et al. (US 6393474), hereafter Eichert.

Regarding **claim 6**, Wittmann discloses all the limitations of claim 6 except for the processing parameters constitute code executable by the active node.

The general concept of an active node receiving code in an active packet reserving policy is well known in the art as taught by Eichert. (Col. 2, line 65 through Col. 3 line 1 which teaches that the active packet file may contain the policy code executable by the active network devices.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the method of reserving resources of Wittmann and the general concept of an active node receiving code in an active packet reserving policy as taught by Eichert in order to decouple the policy services from the underlying node infrastructure.

Regarding **claim 7**, Wittmann discloses all the limitations of claim 6 except for the processing parameters identify a server and a code downloadable by the node from the server.

The general concept of a policy reservation packet identifying a server and code to download and execute from the server is well known in the art as taught by Eichert. (Col. 2, lines 60-67, Col. 3 lines 1-3 teach that the code in the active packet may be stored on a distributed database and the active packet may just inform the device where the packet may be found.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the method of reserving resources of Wittmann and the general concept of a policy reservation packet identifying a server and code to download and execute from the server as taught by Eichert in order to make sure the code is secure by authenticating the server that contains the executable code.

5. **Claim 12** is rejected under 35 U.S.C. 103(a) as being unpatentable over Wittmann as applied to claim 1 above, and further in view of Official Notice.

Wittmann discloses all the limitations of claim 12 except for a flag in the header of a packet that indicates that the packet is active (has a QF Object) or passive (does not have a QF object).

The general concept of using a flag in the header to indicate whether a packet is active or passive is old and well known in the art, and the Examiner takes Official Notice

of this fact as evidenced by Applicant's admission that this is a known method of identifying active and passive packets. (Specification page 1 lines 29-33)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Wittmann with the general concept of using a flag in the header to indicate whether a packet is active or passive in order to expedite the processing of flows that do not require quality filters.

Response to Arguments

6. Applicant's arguments filed 7/2/2007 have been fully considered but they are not persuasive.

Summary of Applicant's Arguments

1) Applicant argues that the objection to the lack of drawings should be withdrawn in view of the New Drawing Sheet submitted.

2) Applicant argues that the objection to claims 1-9 should be withdrawn in view of the amended claims.

3) Applicant argues that the rejection of claims 1, 8, and 9 under 35 U.S.C. 112 should be withdrawn in view of the amended claims.

4) Applicant argues that the rejection of claims 1-8 under 35 U.S.C. 101 should be withdrawn.

5) Applicant argues that the rejection of claim 1 under 35 U.S.C. 102(b) in view of Wittmann et al. should be withdrawn because Wittmann does not disclose active packets.

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6) Applicant argues that the rejection of claim 4 under 35 U.S.C. 102(b) in view of Wittmann should be withdrawn because Wittmann does not disclose an active data flow identifier.

7) Applicant argues that the rejection of claims 6-7 under 35 U.S.C. 103(a) in view of Wittmann and in further view of Eichert should be withdrawn for the reasons in item 5.

Response to Arguments

1) The Examiner accepts the drawing submitted with this Amendment and withdraws the objection to the drawings.

2) The Examiner withdraws the objections to the claims so Applicant's arguments are moot.

3) The Examiner withdraws the the rejection of claims under 35 U.S.C. 112 so Applicant's arguments are moot.

4) The Examiner withdraws the rejection of claims under 35 U.S.C. 101 so Applicant's arguments are moot.

5) The Examiner maintains the rejection and asserts that Wittmann does indeed disclose active packets, as by Applicant's definition of an active packet in the specification, all that is necessary is for the packet to carry information to be used by an active node. The QF module is information meant to be used by an active node, therefore the packet containing it is an active packet.

6) The Examiner maintains the rejection and asserts that Wittmann does disclose an active data flow identifier as stated in the rejection of claim 4 above.

7) The Examiner maintains the rejection of claims 6-7 under 35 U.S.C. 103(a) as Applicant's arguments regarding the independent claim are not persuasive.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Agrawal et al. (US 6570926) discloses active packets and active packet flows containing programs and packet identifiers.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael E. Keefer whose telephone number is (571)

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270-1591. The examiner can normally be reached on Monday through Friday 5:30am-2pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MEK 8/14/2007


NATHAN FLYNN
SUPERVISORY PATENT EXAMINER